

**CONTENTS OF ANIMAL FEED SCIENCE AND TECHNOLOGY,
VOLUME 27**

VOL. 27 NOS. 1-2

DECEMBER 1989

Effects of the ionophore antibiotics lasalocid and cationomycin on ruminal fermentation in vitro (RUSITEC)	
C. Bogaërt, L. Gomez, J.P. Jouany (Ceyrat, France) and G. Jeminet (Aubière, France)	1
Urea supplementation compared with pretreatment. 1. Effects on intake, digestion and live-weight change by sheep fed a rice straw	
A. Djajanegara and P.T. Doyle (Parkville, Vic., Australia)	17
Urea supplementation compared with pretreatment. 2. Effects on ruminal and post- ruminal digestion in sheep fed a rice straw	
A. Djajanegara and P.T. Doyle (Parkville, Vic., Australia)	31
Feed components as internal markers in digestion studies with dairy cows	
S. Tamminga, S. Meijs, H. Boer (Wageningen, The Netherlands) and P.H. Robinson (Edmonton, Alb., Canada)	49
Evaluation of markers, sampling sites and models for estimating rates of passage of silage or hay in dairy cows	
K.A. Beauchemin and J.G. Buchanan-Smith (Guelph, Ont., Canada)	59
The effect of Greek cottonseed meal on the performance of laying Japanese quail	
A.L. Yannakopoulos and A.S. Tserveni-Gousi (Thessaloniki, Greece)	77
Effect of carrier on the release of gentian violet from antifungal additives in poultry feed	
T.C. Chen and E.J. Day (Mississippi State, MS, U.S.A.)	83
The effect of karanja (<i>Pongamia glabra</i> Vent) cake on the performance of White Leghorn pullets	
R. Natanam, R. Kadirvel and K. Viswanathan (Madras, India)	89
The toxic effects of karanja (<i>Pongamia glabra</i> Vent) oil and cake on growth and feed efficiency in broiler chicks	
R. Natanam, R. Kadirvel and R. Ravi (Madras, India)	95
Chitin analysis of hay as a means of determining fungal invasion during storage	
K.M. Wittenberg, S.A. Moshtagh-Nia, P.A. Mills and R.G. Platford (Winnipeg, Man., Canada)	101
Post-ruminal digestion of starch in the presence of phenolic monomers	
H. Mahmoudzadeh, E. Karangwa, G.E. Mitchell, Jr., R.B. Muntifering and R.E. Tucker (Lexington, KY, U.S.A.)	111
Yield, composition and nutritive value of leaf protein concentrates from mixed forages of cereals and legumes	
E. Pisulewska (Kraków, Poland), P. Hanczakowski and P. Pisulewski (Balice, Poland)	117
Effects of solvent extractions, heat treatments and added cholesterol on <i>Sesbania sesban</i> toxicity in growing chicks	
A.A. Shqueir (Bethlehem, Israel), D.L. Brown, S.J. Taylor, I. Rivkin and K.C. Klasing (Davis, CA, U.S.A.)	127

Factors affecting the apparent digestibility of protein for swine when determined by the mobile nylon bag technique G. Cherian, W.C. Sauer (Edmonton, Alb., Canada) and P.A. Thacker (Saskatoon, Sask., Canada)	137
Quality assessment of tropical browse legumes: tannin content and protein degradation J.H. Ahn, B.M. Robertson, R. Elliott, R.C. Gutteridge and C.W. Ford (St. Lucia, Qld., Australia)	147
The nutritive value of spring-grown herbage produced on farms throughout England and Wales over four years. I. The effect of stage of maturity and other factors on chemical composition, apparent digestibility and energy values measured in vivo D.I. Givens, J.M. Everington (Stratford-on-Avon, Gt. Britain) and A.H. Adamson (Bristol, Gt. Britain)	157

VOL. 27 NO. 3**JANUARY 1st 1990**

The nutritive value of spring-grown herbage produced on farms throughout England and Wales over 4 years. II. The prediction of apparent digestibility in vivo from various laboratory measurements D.I. Givens, J.M. Everington (Stratford-on-Avon, Gt. Britain) and A.H. Adamson (Bristol, Gt. Britain)	173
The nutritive value of spring-grown herbage produced on farms throughout England and Wales over 4 years. III. The prediction of energy values from various laboratory measurements D.I. Givens, J.M. Everington (Stratford-on-Avon, Gt. Britain) and A.H. Adamson (Bristol, Gt. Britain)	185
Forage quality of five cool-season grasses. I. Cultivar effects M. Collins (Lexington, KY, U.S.A.) and M.D. Casler (Madison, WI, U.S.A.)	197
Forage quality of five cool-season grasses. II. Species effects M. Collins (Lexington, KY, U.S.A.) and M.D. Casler (Madison, WI, U.S.A.)	209
The nutritive value of full-fat and defatted Australian rice bran. I. Chemical composition B.E. Warren and D.J. Farrell (Armidale, N.S.W., Australia)	219
The nutritive value of full-fat and defatted Australian rice bran. II. Growth studies with chickens, rats and pigs B.E. Warren and D.J. Farrell (Armidale, N.S.W., Australia)	229
The nutritive value of full-fat and defatted Australian rice bran. III. The apparent digestible energy content of defatted rice bran in rats and pigs and the metabolisability of energy and nutrients in defatted and full-fat bran in chickens and adult cockerels B.E. Warren and D.J. Farrell (Armidale, N.S.W., Australia)	247
The nutritive value of full-fat and defatted Australian rice bran. IV. Egg production of hens on diets with defatted rice bran B.E. Warren and D.J. Farrell (Armidale, N.S.W., Australia)	259

VOL. 27 NO. 4**JANUARY 15th 1990**

Ozone-treated lucerne hay as a model to study lucerne degradation and utilization by rumen bacteria J. Miron (Bet Dagan, Israel) and M.T. Yokoyama (East Lansing, MI, U.S.A.)	269
--	-----

Chewing activity of ruminants as a measure of physical structure — a review of factors affecting it J.L. De Boever, J.I. Andries, D.L. De Brabander, B.G. Cottyn and F.X. Buysse (Melle-Gontrode, Belgium)	281
Relationships between chemical composition, digestibility in vitro and cell-wall degradability of wheat straw treated with different amounts of ammonia and water at elevated temperature V.C. Mason, M.S. Dhanoa, R.D. Hartley and A.S. Keene (Maidenhead, Gt. Britain).....	293
Digesta collection procedure may affect ileal digestibility in pigs fed diets based on wheat bran or beet pulp B. Darcy-Vrillon and J.P. Laplace (Jouy-en-Josas, France)	307
The effect of rate of feeding on the nutritional value of three triticale cultivars for growing pigs E.S. Batterham, H.S. Saini and D.R. Baigent (Wollongbar, N.S.W., Australia)	317
An evaluation of low-energy feedstuffs in diets for laying hens H.L. Stilbrn and P.W. Waldroup (Fayetteville, AR, U.S.A.)	327
Preparation of a low-phytate feed mixture and bioavailability of its phosphorus to chicks X.S. Zhu, P.A. Seib, Y.T. Liang (Manhattan, KS, U.S.A) and G.L. Allee (Columbia, MO, U.S.A.)	341
Book Review	
Animal nutrition.....	353
Author Index	355